UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	**Applicant(s)**
Office Action Summary	09/837,351	RUDOLPH ET AL.
	Examiner	**Art Unit**	
	Clara Yang	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 July 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>11-17</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>11-17</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>22 November 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities:

> Page 1, line 17: Change "up to date" to "up-to-date."

> Page 2, line 15: Change "up to date" to "up-to-date."

> Page 2, line 24: Change "to read and write data to and from the tag 306" to "to read data from and write data to the tag 306."

> Page 4, lines 1 and 6: Change "trade off" to "trade-off."

> Page 7, line 3: Change "RFID tag 101" to "RFID tag 102."

> Page 7, line 4: Change "hand held" to "handheld."

> Page 7, line 19: Change "Basic HHT" to "basic HHT."

Appropriate correction is required.

Claim Objections

2.   Claims 11-17 are objected to because of the following informalities:

> Claim 11's limitations employ the phrase "for storing." It has been held that the recitation that an element is "for" performing a function is not a positive limitation but only requires the ability to so perform. In addition, the claim calls for a radio frequency identification (RFID) tag's memory to store "at least one updatable read field to identify a source of the packaged product and at least one updatable write field to identify a destination of the packaged product." The applicant, however, only teaches that the "To" and "From" fields are updatable or writable (see page 7, lines 19-22) and fails to specifically teach the reading of the fields (see the following 35 USC §112, 1st paragraph rejection of claims 11 and 14). Consequently, the examiner suggests changing "at least one updatable read field" to "at least one updatable field" and "at least one updatable write field" to "at least one updatable field" since a writable field must updatable and vice versa.

> Claims 12-16 depend on claim 1, which has been canceled. The examiner interprets claims 12-16 to depend on claim 11.

> Claim 12: As explained in the objection of claim 11, the examiner suggests changing the limitation "the updatable read field is defined by a 'from' field" to "the

updatable field identifying a source of the packaged product is defined by a 'from' field" since the "From" field is an updatable field.

> Claim 13: As explained in the objection of claim 11, the examiner suggests changing the limitation "the updatable write field is defined by a 'to' field" to "the updatable field identifying a destination of the packaged product is defined by a 'to' field" since a writable field must updatable and vice versa.

> Claim 14: The claim's limitations employ the phrase "for tracking purposes." It has been held that the recitation that an element is "for" performing a function is not a positive limitation but only requires the ability to so perform.

> Claim 17: The phase "simultaneously updating the data on the RFID tag and to continuously updating the RFID tag with [new] location information" is not in idiomatic English.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4.   Claims 11, 12, 14, and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement. The claim(s) contains subject matter that was

not described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention.

Regarding claims 11 and 12, claim 11 calls for an RFID tag's memory to store "at least

one updatable read field to identify a source of the packaged product," and claim 12 calls for

"the updatable read field is defined by a 'from' field." Though the applicant discloses that RFID

tag 102 "typically contains a unique identification number, a URL address, a 'From' field to

identify the source of the package 101 and a 'To' field to identify its destination," the applicant

is silent on a reader reading tag 102's "From" and "To" fields. The specification only supports the reading of tag 102's universal resource locator (URL) (see page 6, lines 13-17). In addition, claim 11 calls for the RFID tag's memory to be updated with data "each time the RFID tag is interrogated by the RFID reader." The applicant's specification, however, fails to support that data is provided to the RFID tag during *each* interrogation. When an RFID reader interrogates an RFID tag in order to obtain data from the RFID tag (see page 5, lines 5-21 and page 6, lines 15-17), the applicant is silent on the RFID tag updating its memory with the RFID reader's interrogation data.

Claim 14 calls for the RFID tag's memory to be "continuously updated with a new location information that can be accessed for tracking purposes by directly reading the data on the RFID tag without access to a database on a computer network." The applicant only teaches, however, that operators "can update the new 'to' location" and that the item's "current movement can be preserved on tag 102 itself to insure accurate location information availability even when Internet access is not available" (see page 7, lines 19-22). The applicant omits teaching that tag 102 is "continuously updated" and that tag 102's new destination information is accessed "by directly reading" the new destination information from the tag. The specification only provides support for a reader directly reading product reference information or the URL stored on tag 102 (see page 5, lines 7-21 and page 6, lines 15-17). On page 7, the applicant teaches that warehouse operators and customers use handheld terminals (HHT) 103 to interrogate tag 102, wherein HHT 103 displays information regarding "pick" or "put-away" operations. Because the advanced HHT 103 can access a database via the Internet in order to obtain product information, MSDS, etc., it is understood that the advanced HHT 103 reads the product reference information or URL from tag 102's memory.

Claim 15 calls for the RFID tag "to access various product information via a computer network database." The applicant, however, teaches that the RFID tag only provides links to product information that is used by an interrogator to access the product information stored on a computer network database (see page 1, lines 24-27; page 5, lines 18-23; page 6, lines 15-20; and page 7, lines 9-13). The examiner considers claim 15 to mean "wherein the RFID tag on the packaged product is used to access various product information stored on a computer network database."

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The meaning of the last limitation (i.e., "simultaneously updating the data on the RFID tag and to continuously updating the RFID tag...") is unclear. Is the process of updating the RFID tag's stored data supposed to simultaneously occur with the tracking of the packaged product or with the updating of the RFID tag's new location information? Or is the claim calling for "simultaneously and continuously updating the RFID tag with new location information that can be accessed for tracking purposes?" Since the applicant only teaches updating RFID tag 102's "To" field, thereby indicating RFID tag 102's current movement (see page 7, lines 19-22), the examiner interprets the last limitation of claim 17 to mean, "continuously updating the RFID tag with new location information that can be accessed for tracking purposes."

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

8.   Claim 11-14 rejected under 35 U.S.C. 102(b) as being anticipated by Theimer et al. (US

5,627,517).

Referring to claim 11, Theimer teaches a routing system comprising (a) tag 100 having

memory 230 that stores a unique package identification (ID) code, the name and address of the

package's sender, a record of the routing stations the package has passed, a sequence of

destinations between the point of origin and the ultimate destination, and the package's

ultimate destination (see Col. 5, lines 1-7 and 56-62; Col. 6, lines 39-44; Col. 8, lines 14-43 and 66-

67; and Col. 9, lines 1-5); and (b) a plurality of radio transceivers 20 (i.e., readers) in routing

stations such that tag 100 records each radio transceiver 20's destination ID during the

interrogation process in order to maintain a record of the routing station the package has passed

(see Col. 4, lines 1-7 and 20-56; Col. 5, lines 1-7; Col. 7, lines 37-41; Col. 8, lines 66-67; and Col. 9,

lines 1-5). Tag 100 is an RFID tag because Theimer discloses that tag 100 stores a unique ID and

includes radio transceiver 202 (see Col. 5, lines 56-59 and Col. 6, lines 39-44). In addition, the

record of the routing stations the package has passed is an updatable "From" field since the

record indicates the package's previous destination points (i.e., source) along the route, and the

sequence of destinations between the point of origin and the ultimate destination is an

updatable "To" field since Theimer discloses that tag 100 is able to change the package's

destination in order to perform corrective rerouting when the package is misrouted (see Col. 8, lines 60-67 and Col. 9, lines 1-5).

Regarding claim 12, as explained in the previous rejection of claim 11, memory 230 of Theimer's tag 100 includes an updatable "From" field that stores the record of the routing stations the package has passed (see Col. 4, lines 20-32; Col. 8, lines 66-67; and Col. 9, lines 1-5).

Regarding claim 13, as explained in the previous rejection of claim 11, memory 230 of Theimer's tag 100 includes a "To" field that stores a sequence of destinations between the point of origin and the ultimate destination functions, wherein the sequence of destinations is updatable when tag 100 determines that the package has been misrouted (see Col. 8, lines 66-67 and Col. 9, lines 1-5).

Regarding claim 14, in one example, Theimer teaches tag 100 storing a sequence of destinations between a sender's location to the desired ultimate destination: a truck, a distribution center, another truck, an airport, another distribution center, another airplane, etc. (see Col. 8, lines 14-33). When tag 100 determines that it is in the second truck, tag 100 updates its destination (i.e., the "To" field) to indicate the airport and transmits its new destination to the truck's transceiver 20, indicating to the truck that the package is to be delivered to the airport (see Col. 3, lines 36-46; Col. 4, lines 1-7 and 20-67; Col. 5, lines 1-7; and Col. 8, lines 14-39). In other words, the truck's transceiver 20 directly reads tag 100's new destination (i.e., new location information) without access to a database on a computer network.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11.   Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert (US 5,963,927).

Referring to claims 11 and 17, Herbert teaches a mailing system. As called for in claim 11, Herbert's system (see Figs. 2-4) comprises (a) a smart device having memory 14 that stores a field identifying mail item 10's sender, a field containing routing information, and a field identifying mail item 10's final destination address (see Col. 1, lines 63-66; Col. 2, lines 1-42 and 54-65; and Col. 4, lines 32-45 and 55-59); and (b) readers 50, 52, 53, and 54 at predetermined points, wherein each reader interrogates the smart device and transmits to the smart device the time and date at which mail item 10 passes through a predetermined point, causing the smart device to update memory 14 (see Col. 4, lines 40-45 and Col. 5, lines 19-24). It is understood that the field containing the times and dates when mail item 10 passes through predetermined points is an updatable field identifying each of mail item 10's departure points (i.e., source). In addition, Herbert teaches that routing information for mail item 10 is written to smart device's

memory 14 during handling of mail item 10 (see Col. 4, lines 40-45); thus memory 14's field that stores routing information is an updatable field identifying mail item 10's destinations (see Col. 2, lines 54-60 and Col. 4, lines 40-45). As called for in claim 17, Herbert's method comprises (a) tracking mail item 10 with readers using the data stored in memory 14 of the smart device attached to mail item 10 (see Col. 5, lines 3-6 and 19-29); and (b) updating the smart device with the time and date at which mail item 10 passes through a predetermined point (i.e., new location information) that enables computer 51 to track mail item 10 (see Col. 4, lines 40-45 and Col. 5, lines 3-6 and 19-24). Though Herbert teaches that the smart device transmits and receives data in a contactless manner (see Col. 2, lines 29-42), Herbert is silent on the smart device being an RFID tag and readers 50, 52, 53, and 54 being RFID readers, as called for in claims 11 and 17.

In an analogous art, as explained in the 35 USC §102(b) rejection of claim 11, Theimer's tag 100 is an RFID tag because Theimer discloses that tag 100 stores a unique ID and includes radio transceiver 202 (see Col. 5, lines 56-59 and Col. 6, lines 39-44).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Herbert's system and method as taught by Theimer because a smart device that is an RFID tag and a reader that is an RFID reader enable the smart device to receive and transmit data in a contactless manner without having to be correctly oriented relative to a reader (see Herbert, Col. 2, lines 35-42).

Regarding claim 12, Herbert discloses that memory 14 includes an updatable field containing the times and dates when mail item 10 passes through predetermined points (see Col. 4, lines 40-45 and Col. 5, lines 19-24). In other words, memory 14's updatable field that identifies each of mail item 10's departure points (i.e., source) is a "From" field.

Regarding claim 13, Herbert further teaches that routing information for mail item 10 is written to smart device's memory 14 during handling of mail item 10 in the postal system and that the routing information enables automatic sorting and routing of mail item 10 (see Col. 2, lines 54-60 and Col. 4, lines 40-45); thus memory 14's field that stores routing information identifies mail item 10's destinations and is an updatable "To" field.

Regarding claim 14, memory 14 of Herbert's smart device is continuously updated with the time and date at which mail item 10 passes through a predetermined point (i.e., new location information) that enables computer 51 to track mail item 10 (see Col. 4, lines 40-45 and Col. 5, lines 3-6 and 19-24). Herbert teaches that readers 52, 53, and 54 read information from the smart device and provides the information to computer 51 (see Col. 5, lines 19-24); thus readers 52, 53, and 54 directly access the smart device's information, which includes mail item 10's previous locations and is used by computer 51 to track mail item 10 (see Col. 5, lines 3-6 and 19-29).

Regarding claim 15, Herbert discloses that the smart device's memory 14 stores a unique identity for mail item 10 such that information concerning mail item 10 is accessed via computer 51's database (see Col. 4, lines 32-45 and Col. 5, lines 3-6 and 11-24). Herbert teaches that reader 50 reads information stored in a smart device's memory 14 and inputs the data to computer 51, wherein the information read from a smart device includes a sender's address, the sender's ID number, a recipient's address (i.e., final destination), routing information, postal class, weight, contents of mail item 10, previous destinations, and a unique ID for mail item 10 (see Col. 2, lines 54-65; Col. 4, lines 32-48; and Col. 5, lines 3-24).

Regarding claim 16, Herbert teaches that the postal authority (i.e., a user) updates the data stored in a smart device's memory 14 at predetermined points as mail item 10 is routed

through the postal system. Because Herbert discloses that the smart device stores the times and

dates at which mail item 10 passed through predetermined points in the postal system (see Col.

4, lines 40-45), it is understood that Herbert's smart device permits a user to update memory 14

while the smart device archives previously received data.

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

> Tuttle (US 5,497,140) teaches an RFID shipping label having a memory that stores an ID number, a sender's name, point of origin, weight, size, route, destination, etc.

> Shimada et al. (US 6,125,306) teach a pallet distribution system comprising a plurality of pallets, wherein each pallet has an RFID tag that stores the pallet's present position, the departure or arrival time of the pallet, and readers that read a pallet's RFID tag.

> Mitchell et al. (US 6,520,544) teach a system comprising (a) a label 43 embedded with an RFID device 44 forming an RFID tag and having a data memory that stores variable information including the origin, contents, position, and destination of a reusable bin 48, wherein the origin, contents, position, and destination fields are updatable; and (b) RFID detectors positioned on or adjacent to a track over which bin 48 moves to read information from the RFID tag program the RFID tag with position information (i.e., valuable information).

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Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Clara Yang whose telephone number is (571) 272-3062. The

examiner can normally be reached on 9:00 AM - 7:30 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CY
2 August 2006

Clara Yang